

REMARKS

The Specification of this application has been amended to correct a typographical error and a grammatical error. The amended specification is now self consistent and correct. No new matter has been introduced by this amendment.

Claims 1-3 have been canceled without prejudice and claims 4-8 have been amended. Claims 4-10 remain in the application. It is noted with thanks that claims 9 and 10 are drawn to allowable subject matter.

Concurrently filed with this amendment is a request to correct figures 1, 7, and 14 together with substitute formal drawings for Figures 1, 7 and 14. Indicates for nodes have been removed, as can clearly be understood by the patent specification. No new matter has been introduced by this amendment.

Claims 4 and 5 have been amended to highlight the role of the pixel at which the horizontal and vertical difference calculations are being made. The amended claim also makes clear that each horizontal difference signal is determined by the values around a central pixel. The role of this center pixel may be seen in equation 8 on page 9 in the specification and the numbering scheme used in equation 8 may be referenced to figure 2.

Claims 6-8 have been amended to properly reflect that the horizontal difference signal threshold is expected to be greater than zero before gain control is executed as can be seen in Figures 8, 9, 10, 13, 15, 16 and 17.

Claims 4 and 5 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant respectfully transgresses this rejection.

Claims 4 and 5 are supported by the specification on page 11, lines 5-13 where it is explained that an erroneous vertical edge signal may be a function of both the horizontal difference signal and a difference in vertically adjacent pixels. By using these two signals to generate the vertical edge suppression signal, the invention may detect and properly control the erroneous vertical edge signal. Also, on page 14, lines 7-16, the applicant makes clear the circumstances that may

result in an erroneous vertical edge signal. Claims 4 now specify that the horizontal difference signal corresponds to a pixel value less a weighted sum of a luminance difference between horizontally adjacent pixels on opposite horizontal sides of said pixel and a difference between digital video camera CCD output signals vertically adjacent on opposite vertical sides of said pixel. Claim 5 now specifies that the horizontal difference signal corresponds to a pixel value less a weighted sum of an output difference between horizontally adjacent pixels on opposite horizontal sides of said pixel and a difference between digital video camera CCD output signals vertically adjacent on opposite vertical sides of said pixel. These revisions are supported by the patent specification, and should overcome the indefiniteness requirement raised in the office action.

Claims 4-8 were rejected under 35 U.S.C. 103(a) as being unpatentable over The Applicant's Admitted prior Art in view of Maenaka et al (Us Patent No.: 5,555,023). The applicant respectfully traverses this rejection.

In the amended claims 4 and 5, it is noted that the present invention relies upon more pixels than does Maenaka to calculate its horizontal difference signals. Maenaka uses pixels G11, G31, G13 and G33, which are respectfully referred to in the present invention as pixels G(1), G(7), G(3) and G(9), to calculate a horizontal correlation value, Sh , which in the present invention is referred to as the horizontal difference signal. Sh is then calculated using equation 7 on column 6, line 26 of Maenaka. This equation differs from both equation 8 and 9 of the present invention by the absence of pixel G(5) also referred to as G22 in Maenaka. The dependence on the center pixel lends further granularity to the calculation performed in the present invention and renders claims 4 and 5 distinct from that shown in Maenaka.

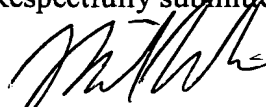
The Examiner noted that in Maenaka, vertical edge signal gain control is only executed when the horizontal difference signal is greater than zero. The amended claims 6-8 now require that the horizontal difference signal is greater than zero.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 4-10 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



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